NFPA No.

498-T

Tentative

Tentative Standard for

EXPLOSIVES MOTOR VEHICLE TERMINALS

May, 1969

CAUTION

Readers are warned that this text does not present official recommendations of the National Fire Protection Association in its present form and is subject to major revision.

This pamphlet circulates for review and comment these recommendations of the Sectional Committee on Explosives of the Committee on Chemicals and Explosives which were Tentatively Adopted at the 1969 NFPA Annual Meeting.

Comments are solicited on these Tentative Recommendations from all those interested. Such comments should be forwarded to the NFPA Office by September 1, 1969 to receive full Committee consideration.

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Official NFPA Definitions

Adopted Jan. 23, 1964. Where variances to these definitions are found, efforts to eliminate such conflicts are in process.

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Tentative Standard for

Explosives Motor Vehicle Terminals

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This text was developed by the Sectional Committee on Explosives of the NFPA Committee on Chemicals and Explosives. It was processed in accordance with NFPA Regulations Governing Technical Committees and was adopted as a Tentative Standard at the 1969 NFPA Annual Meeting, held May 12-16, in New York, N.Y.

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SCOPE: This committee serves as a policy-making and correlating group to administer and process reports of the various sectional committees dealing with chemicals and explosives.

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SCOPE: To develop and maintain current codes for explosives and related materials.

Tentative Standard for

Explosives Motor Vehicle Terminals

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FOREWORD

This Standard is intended to prevent fires and explosions at explosives motor vehicle terminals. Such terminals provide parking facilities for explosives vehicles awaiting transfer to another carrier. They are a necessary part of over-the-road transportation of explosives since territorial restrictions on motor carrier operations often necessitate that a load of explosives be hauled by more than one carrier before it reaches its destination. Explosives motor vehicle terminals provide parking facilities for trailers, and they may also provide facilities for unloading and reloading partial loads, vehicle maintenance, and driver rest.

The motor vehicles using explosives motor vehicle terminals operate under the Motor Carrier Safety Regulations of the Department of Transportation. They are primarily transporting explosives and ammunition on govèrnment bills of lading, but some carriers of commercial explosives also require these facilities.

Properly operated explosives motor vehicle terminals are in the best interest of the public, for they enhance safety in transportation by providing a controlled and safe location for placing vehicles for inspection, maintenance and interlining with connecting carriers. The over-all result is improved safety on the highway.

CHAPTER 1. SCOPE AND DEFINITIONS

11. Scope.

111. This Standard applies to the design and operating features of explosives motor vehicle terminals related to fire prevention and fire protection.

112. This Standard does not apply to motor freight terminals for vehicles handling general freight.*

12. Definitions.

121. An explosives motor vehicle terminal is a designated area where motor vehicles transporting explosives may be parked pending further movement in transportation. An explosives motor vehi-

*For fire protection for motor freight terminals see NFPA No. 512, Recommended Good Practice for Truck Fire Protection.

cle terminal may consist of interchange lots, less-than-truck-load lots, maintenance shops, driver rest facilities, or any combination of these facilities.

122. An explosives interchange lot is the specific area of an explosives motor vehicle terminal on which motor vehicles loaded with explosives are parked.

123. An explosives less-than-truck-load lot is a designated area of a motor truck facility where less than truck loads of explosives may be held for transfer from one vehicle to another for continuance in transportation.

124. A vehicle is any conveyance of any type whatsoever operated upon the highway.

CHAPTER 2. EXPLOSIVES INTERCHANGE LOTS

21. General.

211. All explosives interchange lots shall be located in a relatively isolated area and not in close proximity to schools, hospitals, public buildings, dwellings or places where people assemble.

212. The lots should be separated from other facilities on the explosives motor vehicle terminal such as buildings, other structures, parking lots, fuel and power facilities. When floodlight illumination is provided, overhead power lines should not be erected within the perimeter of the lot.

213. Weeds, underbrush, vegetation or other combustible materials should be cleared for a distance of 25 feet from the lot.

214. The lot should be protected from unauthorized persons or trespassers through the use of warning signs, gates, fences and intermittent patrols.

215. Fire protection equipment capable of handling incipient fires should be provided at each interchange lot. Portable fire extinguishers having a minimum rating of 4-A:30-B:C should be placed at a readily accessible location. Water lines with hoses connected may be installed in addition to the portable extinguishers.

216. More than one lot within the terminal should be provided when a large number of motor vehicles are to be parked. The lots should be separated as far as practicable to reduce the concentration of explosives in any single area in the terminal.

217. If the terrain between any two lots does not provide natural barricades and there is limited space in which to provide substantial separation between the lots, then artificial barricades should be erected.

NOTE: "Natural Barricade" means natural features of the ground, such as hills, or timber of sufficient density that one lot cannot be seen from the other when the trees are bare of leaves. "Artificial Barricade" means an artificial mound or revetted wall of earth of a minimum thickness of three feet.

22. Vehicle Parking.

221. Before any vehicle is taken to an explosives interchange lot, a thorough inspection should be made of the entire unit. As a minimum, inspection should comply with the DOT equipment interchange rules which include but are not limited to a check for hot tires, hot wheel bearings, hot brakes, fuel leakage, oil leakage, accumulations of oil or grease, the electrical system, and any apparent physical damage to the vehicle which could cause or contribute to a fire. Any defects should be corrected before the vehicle is placed on the lot.

222. After a loaded motor vehicle is properly positioned on the explosives interchange lot, the tractor should be immediately disconnected and removed from the lot.

223. Where possible, motor vehicles loaded with commercial explosives should be parked on separate lots from those containing military explosives.

224. Adequate spacing should be maintained between parked vehicles to allow for ready access to any vehicle on the lot.

225. A self-propelled vehicle loaded with explosives may be parked on an explosives interchange lot but the self-propelled vehicle should be placed on a lot separated from loaded trailers and semitrailers and in a position where it may be immediately removed in case of an emergency.

226. No vehicles transporting other hazardous materials should be parked on an explosives interchange lot unless the materials being transported are compatible with explosives. In the case of an emergency where vehicles loaded with other hazardous materials are brought to an explosives interchange lot, such vehicles should be parked at a location on the lot well separated from the explosives-laden vehicles.

227. Except in the case of an emergency, no explosives should be transferred from one vehicle to another on an explosives interchange lot while other vehicles loaded with explosives are parked on the lot.

228. The vehicles on the lot should be maintained in the same condition as is required for highway transportation, including placarding.

23. Control of Ignition Sources.

231. Except for minor repairs, no repair work should be performed on any vehicle parked on the lot. Any repair work involving cutting, welding, operation of the vehicle engine or electrical repairs must be performed after the cargo has been removed and the vehicle to be repaired has been removed from the lot.

232. Smoking, matches, open flames, spark-producing devices and firearms should be prohibited inside or within 50 feet of the lot.

24. Security Against Trespassers

241. When any vehicle transporting explosives is parked on a lot at least one employee shall be assigned to patrol the lot at frequent and irregular intervals. If the lot is enclosed by a security fence and the gates locked and the area surrounding the lot posted with warning signs, then the patrolling need not be required.

25. Employee Training.

251. The operator of the lots should maintain an active safety training program in emergency procedures for all employees stationed at the terminal. Written emergency instructions should be posted and readily accessible to all employees.

CHAPTER 3. LESS-THAN-TRUCK-LOAD EXPLOSIVES LOTS

31. General

311. A temporary storage facility conforming to the construction requirements of Class 1 magazines, as described in NFPA No. 495, Code for the Manufacture, Transportation, Storage and Use of Explosives and Blasting Agents, may be provided in the terminal area. If blasting caps or other initiators are to be temporarily stored at the same time as other explosives, then two temporary storage facilities shall be required, one for the blasting caps or other initiators and the other for the other explosives.

312. The temporary storage facilities should be located a minimum of 50 feet from structures on the adjoining property or from any facility that could create a fire hazard. An area at the loading dock may be designated for the temporary storage of explosives in a trailer, provided it is not in proximity to a fire hazard, such as an area where smoking is permitted, or where combustible or flammable materials are present.

32. Operations.

321. Explosives brought into the terminal to await shipment should be immediately placed in the temporary storage facility until such time as the explosives are loaded on the over-the-road motor vehicle.

322. Explosives delivered to the terminal by a connecting carrier may be retained in the trailer at a designated section of the loading dock, or the trailer may be parked in an isolated area of the terminal, or the explosives may be placed in the temporary storage facility.

323. The vehicles on the lot should be maintained in the same condition as is required for highway transportation including placarding.

324. Explosives should not be retained on the lot, either in a trailer or temporary storage facility, for a period longer than necessary, but in no case for more than 72 hours, unless the explosives are stored in a temporary storage facility located away from inhabited buildings, passenger railways and public highways and from other temporary storage facilities in conformity with the American Table of Distances for Storage of Explosives.*

325. Smoking, matches, open flames, spark-producing devices and firearms should be prohibited inside of and within 50 feet of the temporary storage facility or trailer containing explosives.

326. Temporary storage facilities should be appropriately marked so that the terminal employees are aware of the location of the magazines.

327. Portable fire extinguishers, having a capacity of 4-A:30-B:C should be placed at each temporary storage facility and readily available for immediate use.

328. No explosives should remain on the lot either in trailers or temporary storage facilities unless authorized terminal personnel are in the vicinity or unless the temporary storage facilities are located away from inhabited buildings, passenger railways and public highways and from other temporary storage facilities in conformity with the American Table of Distances for Storage of Explosives.*

329. The operator of the lot should maintain an active safety training program in emergency procedures for all employees stationed at the terminal. Written emergency instructions should be posted and readily accessible to all employees.

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*The American Table of Distances for Storage of Explosives is printed in Appendix A of NFPA No. 495, Code for the Manufacture, Transportation, Storage and Use of Explosives and Blasting Agents.

TYPICAL POCKET EDITIONS OF NFPA STANDARDS

List revised as of June, 1969. Most of these standards also appear, with identical text, in the National Fire Codes, republished annually. Titles are abbreviated. For complete list of publications write NFPA.

2M Model Legislation '67 50
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